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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,169	12/03/2003	Michael Gilfix	AUS920030603US1	6755

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EXAMINER	
SCHLIE, PAUL W	

ART UNIT	PAPER NUMBER
2186	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/728,169	GILFIX ET AL.	
	Examiner	Art Unit	
	Paul W. Schlie	2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☒ Claim(s) *3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-27 have been examined.

Claim Objections

2. Claim 3 is objected to because it's cited as being improperly dependant on claim 8; where for the purpose of examination it will be presumed that dependence on claim 2 was intended. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-27 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. As elements critical or essential to the practice of the invention are not included in the claims nor enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

More specifically, as a strong hash/checksum (as taught) is not sufficient to determine equivalence between an arbitrary input data region and one which may have been previously stored (as acknowledged by the applicant on page 14 line 1 of the disclosure, that a strong checksum may only determine equivalence "to a high degree of probability", thereby not unique although seemingly presumed to be), and no operative means to enable a sequence of keys received resulting from the compression of data to be differentiated from a sequence of keys as may result from the recursive compression of said sequence of keys resulting from compression of said sequence of data, and

presuming the intent of the claimed invention is to reliably compress and retrieve previously stored data (as otherwise the claimed invention would arguably lack utility); the disclosure is considered lacking critical elements necessary to enable one of ordinary skill in the art at the time of the disclosed invention without undue experimentation to enable the reliable determination of equivalence between an input region of memory and a given key and a previously stored region of memory; to enable a key resulting from the recursive compression of keys representing compressed data to be differentiated from keys which may represent data such that it may be determined when the correspondingly required recursive decompression process may reliably terminate to enable access to said data; and how a key based upon a non-warranted unique value may be utilized as the basis to uniquely identify a file within a file system; all upon which the claimed invention relies. Corrective action is required, however the applicant is reminded that no new matter may be added which is not supported by the original disclosure.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ranganathan et al. (5,179,378).

As per independent claims 1, 10 and 19, Ranganathan et al. teaches a method and/or system which may compress a sequence of arbitrary data (which may compose any arbitrary data structure) by returning a key or sequence of keys representing previously or newly stored data regions, where regions will be searched at a repeating memory interval of an arbitrarily sized symbol which are collectively equivalent to the said arbitrary data sequence, and which may be utilized to subsequently access said data equivalent; essentially based on the generic Lempel-Ziv class of lossless compression algorithms ultimately relying on literal comparison to initially determine equivalence (see abstract, column 6 lines 33-68, and figure 4), and correspondingly well understood by those of ordinary skill in the art at the time of the claimed invention that such a comparison may be preceded by a comparison of their respective checksum hash values, and/or be utilized to verify the integrity of previously stored data sequences, if deemed advantageous to do so; and that such compressed data may represent a compressed file within the file system effectively comprising a sequence of keys representing regions of the compressed file data, along with the regions storing the data itself; thereby a reference to the sequence of such keys and corresponding memory regions is considered inherently stored in a data structure in association with their corresponding file identifiers such that they may be correspondingly recovered from said file system as is the case for all data stored in association with any file.

As per claims 2-9, 11-18 and 20-27, being dependent on claim 1, 10, 19 or correspondingly dependent claim, claims (4-9) are considered to merely detail features considered inherent in that taught by Ranganathan et al. as detailed above or in

combination with features considered clearly inherent of file system implementations in general; the limitation cited within claims (2-3, 11-12 and 20-21) that keys or a collection of keys resulting from the compression of such data may themselves be recursively compressed potentially resulting in a single key is not given patentable weight as it is not considered enabled as cited in the U.S.C. 35 112 first paragraph above; and as claims (13-18 and 22-27) correspond to claims (4-9) in different form, they are correspondingly rejected based upon the same arguments as presented above.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over copending claims of Applications 10/728,168, 10/728,170 and 10/728,171. Although conflicting claims are

not identical, they are not patentably distinct from each other because all claims are considered to represent a disclosed data compression technique applied in obvious combination to compress semi-persistent, database and/or file data.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul W. Schlie whose telephone number is 571-272-6765, or whose email address is [paul.schlie@uspto.gov]. The examiner can normally be reached on Mon-Thu 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on 517-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PIERRE BATAILLE
PRIMARY EXAMINER
4/2/06